

# D-optimal designs for prospective cohort studies

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## **Stellingen (propositions)**

Belonging to the thesis  
'D-optimal designs for prospective cohort studies'  
By Fetene Bekele Tekle, 8 October 2008

1. The general recommendation to planners of a longitudinal study for linear mixed effects models is to use a purely longitudinal cohort design with the number of repeated measurements equal to the number of regression parameters at the optimal time allocations (this thesis).
2. The common practice of using equi-distance time points for longitudinal studies generally does not lead to very much loss of efficiency (this thesis).
3. For a saturated logistic model with categorical variables, the D-optimal, restricted D-optimal and completely balanced designs coincide (this thesis).
4. The optimal allocations of time points for logistic mixed effects models have the tendency to shift to the left compared to the corresponding optimal allocations of time points for linear mixed effects models (this thesis).
5. The best designs among several competing research designs in theory are those that come up with the best compromise in practice.
6. If your experiment needs statistics, you ought to have done a better experiment. Ernest Rutherford (1908 Nobel prize-winner for chemistry).
7. Making a small error is human; however, a small error in the beginning will lead to great ones in the end.
8. To be a statistician is great!! You never have to be "absolutely sure" of something. Being "reasonably certain" is enough! (Pavel E. Guarisma).
9. For non-European citizens the Dutch residence permit and the sofi-number form a Catch-22 situation.
10. A trip to Ethiopia will make you 7 years younger.